

IRRIGATION WATER MANAGEMENT

WATER QUANTITY WORKSHEET

For Use with Irrigated Cropland, Hayland and Pastureland

As appropriate, this worksheet will be followed to determine eligibility for Regular EQIP program or EQIP G&SW program participation.

REQUIRED DOCUMENTATION

Operator: _____ Fields being treated with practices: _____
 Current Crop: _____ Acres Treated: _____
 Current Irrigation Field Method: _____ Planned Method: _____
 Current Conveyance Method: _____ Planned Method: _____
 Conveyance Material (lining type or soil) _____ or Pipe Material: _____
 Existing ditch shape: _____ or Pipe Diameter: _____
 Age of current pipe: _____
 # of leaks observed and/or repaired throughout the season last year _____
 (This should be a realistic number from the applicant)
 Flow rate of ditch or pipeline: _____ or Water right amount _____ Growing Season
 ET of crop _____
 Current System is metered: Yes or No (circle) Planned System will be metered: Yes or No (circle)

Use of FIRS and seepage templates

Use the FIRS Program and definitions to complete this work sheet. Ditch to pipe, ditch to ditch and pipe to pipe seepage templates **will be used to calculate ALL** conveyance efficiencies. The seepage template before and after values will be substituted into the before and after boxes in question 9 of the FIRS template. All templates will be maintained as part of supporting documentation.

Note: a. Quality criteria for Irrigation Water Management is 75% of the design efficiency found in the Nevada Irrigation Guide.

b. In the pipe to pipe template, a note will be displayed if the current pipe has not exceeded it service life. This does not prevent the calculations from taking place. It serves as a warning to determine if USDA or federally assisted cost share program paid for the pipe under a past contract. If so, then the planned practice is not eligible for cost share until its service life has been exceeded. This also applies to other practices installed with NRCS cost share assistance in the past.

Please note that the seepage calculation in the pipe to pipe template is providing a relatively high seepage loss value. An assumption has been made in the template that pipe is leaking for the entire season and repairs are not being made through out the season of use.

Check the Practices being installed in contract: USE for Regular and G&SW applications

Irrigation Water Management			
<input type="checkbox"/> Land Leveling	<input type="checkbox"/> Land smoothing	<input type="checkbox"/> Irrigation Field Ditch (reorganization only)	
<input type="checkbox"/> Irrigation Canal or Lateral (group only)	<input type="checkbox"/> Structures for Water Control		
<u>Irrigation Water Conveyance:</u> <input type="checkbox"/> Pipeline <input type="checkbox"/> Ditch/Lining			
<u>Irrigation System:</u> <input type="checkbox"/> Sprinkler <input type="checkbox"/> Micro <input type="checkbox"/> Subsurface(barrier)			
<input type="checkbox"/> Sprinkler Retrofit Only <input type="checkbox"/> Tailwater Recovery			
<input type="checkbox"/> Dam, Diversion	<input type="checkbox"/> Irrigation Storage Reservoir	<input type="checkbox"/> Subsurface drain	<input type="checkbox"/> Subsurface Drainage
<input type="checkbox"/> Irrigation Regulating Reservoir	<input type="checkbox"/> Pumping Plant	<input type="checkbox"/> Water Well (Irrigation)	

CALCULATED OUTPUTS (from FIRS template):

	Before	After
System Efficiency		
NRCS Quality Criteria *		
Gross Irrig. Required (In)		
Total Acre feet required		

PERCENT INCREASE IN IRRIGATION SYSTEM EFFICIENCY _____
 (Input value into appropriate land use template for Regular EQIP funding)

Ground and Surface Water Program

The intent of this program is to improve irrigation water net savings to an operation. Net savings is defined as: “water saved per irrigation to meet evapo-transpiration (ET) where limited surface or ground water supplies exist due to drought conditions or where surface or ground water systems do not meet full season evapo-transpiration (ET) needs of the crops grown.

To participate in this program and to receive points to compete for these funds the following conditions must be met:

Threshold value will be a 20 pt. value increase between irrigation method value (question 1 FIRS) and/or conveyance efficiency value (question 9 FIRS).

The following are examples:

- a. A minimum 10 pt. increase in irrigation method value (question 1 FIRS) and 10 pt. change in conveyance efficiency value (question 9 FIRS), or
- b. A minimum 20 pt. increase in conveyance efficiency value (question 9 FIRS)

In addition, the participant is required to develop an irrigation water management plan must be developed and the irrigation system must currently be metered or will be metered as part of the EQIP contract.

Check the following, if they apply:

- _____ Current surface water has been impacted by recurring drought conditions.
- _____ Current groundwater supply has been impacted by recurring drought conditions
- _____ Current surface system does not meet full season evapo-transpiration

Those individuals who do not develop an IWM plan or install a water meter will have their applications considered for regular EQIP funds only. Applications selected for EQIP Ground and Surface Water funds will be selected from each local work group ranking list utilizing the EQIP G&SW ranking column on the ranking list. Those applications not funded with G&SW funds will be considered for regular EQIP supplemental funds allocated for G&SW purposes first before being eligible for regular EQIP funds in order of original ranking priority.

Complete the following information for G&SW Ranking

Choose the priority that best fits the system with practices installed and Meter Condition with contract application

IWM Plan Incentive	Current System Adequate at Quality Criteria	System Conversion Needed/not planned	System Conversion needed & planned w/contract	Present Water Delivery Measured	Planned Water Measurement w/ contract	Priority	Point
X		X		X		Low	2
X		X			X	Low	4
X	X			X		Medium	6
X	X				X	Medium	8
X			X	X		High	10
X			X		X	High	12
Sprinkler Retrofit				Micro Retrofit		Points	
Nozzles only		Nozzles & pumps	Nozzles, pump, bowls		Emitters & Nozzles		
5 pts		7 pts	9 pts		3 pts		
On-Farm Storage to meet ET or drought mitigation							Points
Non-existent/will be installed in contract				Expand Existing Storage with contract			
10 pts				5 pts			
PERCENT INCREASE IN IRRIGATION SYSTEM EFFICIENCY from FIRS (previous page)							

TOTAL SCORE FOR G&SW
(Place score on ranking cover sheet)
